APPLICATION
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FOR: METHOD AND SYSTEM FOR
                 OPERATING A VIRTUAL SHOPPING
                 MALL OF SELLER-ENGAGED TYPE

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METHOD AND SYSTEM FOR OPERATING A VIRTUAL SHOPPING MALL
OF SELLER-ENGAGED TYPE

This patent application claims priority from a Japanese

5   patent application No. 2000-002997 filed on January 11, 2000,

the contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

10   1. Field of the Invention

The present invention relates to a method and system

for operating a virtual shopping mall using a computer system.

In particular, the present invention relates to a method and

system for a virtual shopping mall of a seller-engaged type.

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2. Description of the Related Art

With the spread of the Internet as a background, business

relating to electronic commerce has been a focus of constant

attention.   A mail order business on the Internet is an example

20   of electric commerce business.

A mail order business is conducted in the following way,

for example.   First, a seller obtains a space for a Web site

from an Internet provider.   The seller makes a Web site of

25   his/her shop by himself/herself.   The seller then operates

his/her virtual shop by himself/herself.   A buyer visits the

seller's Web site and applies to purchase an item.   If a sales

contract is established between the seller and the buyer, the

seller sends the item to the buyer.

30   A virtual shopping mall system of this type is very

convenient for buyers.   Buyers can purchase items easily

without visiting actual shops.   Buyers only need to have means,

such as the Internet, for visiting Web sites.

Moreover, the virtual shopping mall system has an advantage for sellers in that sellers can have their own shops with only a small investment. However, there are some troubles for sellers to actually open a Web site.

5   For example, a seller has to create a Web site by himself/herself on a computer to open a virtual shop. This operation requires a great deal of time and effort and a seller has to have an excellent command of computers. A seller can use a service for creating a Web site, but such a service can

10   cost the seller more.

Further, a seller basically has to communicate with buyers through a network by himself/herself. Such communication can be an annoyance to a seller.

Furthermore, there are some sellers who do not want to

15   submit their names as a seller. However, it is difficult to conceal a seller name while securing credibility of a sellers business, according to the conventional art.

Conventionally, a seller generally has to open and maintain his/her own virtual shop by himself/herself as

20   described above. This process can be a workload for sellers. It can especially be a great burden for individual and small business sellers. Therefore, the number of those sellers who can manage a virtual shop is actually very limited.

On the other hand, buyers, such as individual and small

25   business buyers, can use a virtual shopping mall system easily. The reason is that all buyers simply have to participate in a virtual shopping mall system and go shopping. If sellers simply participate in a virtual shopping mall system, the burden on sellers would be greatly reduced. Thus, an individual can

30   easily be a seller using the virtual shopping mall system.

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The problems regarding the conventional art are discussed here with respect, as one example, to the virtual shopping mall system that uses a Web site on the Internet. However, any similar virtual system may cause these common problems.

5   SUMMARY OF THE INVENTION

Therefore, it is an object of the present invention to provide a method and system for a virtual shopping mall of a seller-engaged type, which is capable of overcoming the above

10   drawbacks accompanying the conventional art. The above and other objects can be achieved by combinations described in the independent claims. The dependent claims define further advantageous and exemplary combinations of the present invention.

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In order to achieve the object described above, an aspect of the present invention is a method for operating a virtual shopping mall by using a computer system. This method includes registering virtual goods information, which corresponds to

20   a seller's real goods, to the virtual shopping mall after receiving the virtual goods information from the seller; intermediating business between a seller and a buyer on the virtual shopping mall by presenting the virtual goods information to a buyer; setting a delivery path for the real

25   goods from the seller to the buyer by the buyer's selection of a terminal base to receive the real goods from a plurality of real terminal bases; and trading, which achieves business on the virtual shopping mall.

30   The registering virtual goods information may include capturing an image of the real goods as a part of the virtual goods information; and the intermediating business intermediates the business by presenting the image to the buyer.

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The method for operating a virtual shopping mall may further include: presenting each of the images, which are included in the virtual goods information of a plurality of registered real goods, to the seller when the seller requests to modify the virtual goods information; and making the seller select which of the virtual goods information about real goods among a plurality of the real goods presented by the presenting to modify.

The presenting may dispose each of the images by demagnifying the images and presents to the seller.

The trading may include the seller's setting a terminal base at the plurality of real terminal bases to bring in the real goods.

The method for operating a virtual shopping mall may further include instructing a physical distribution system, which includes the plurality of real terminal bases, to deliver the real goods.

The intermediating business may present the virtual goods information to the buyer as securing anonymity of the seller.

The method for operating a virtual shopping mall may further include setting the maximum value of the number of categories of the virtual goods, which can be displayed on the virtual shopping mall, according to the fee charged from the seller.

The method for operating a virtual shopping mall may further include: updating the seller's database when the trade is established; and the computer system may store the

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amount of past trades for each of the sellers in the seller's
database and setting the fee for the virtual shopping mall
lower for those sellers whose amount of past trades stored
in the seller's database is large.

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The method for operating a virtual shopping mall may
further include inspecting goods to see whether or not the
virtual goods information requested for registration by the
seller is appropriate.

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The method for operating a virtual shopping mall may
further include giving a penalty based on a predetermined
penalty rule on the virtual shopping mall against the seller
who requests to register inappropriate virtual goods

15   information.

The predetermined penalty rule may be established to
give different penalties against the seller according to the
number of registrations of the inappropriate virtual goods

20   information.

The method for operating a virtual shopping mall may
further include forming a black list, which shows a buyer who
does not arrive to receive the real goods despite that a trade

25   on the virtual shopping mall has been established.

Another aspect of the present invention is a virtual
shopping mall system, which is established by using a computer
system. This method includes: a commercial goods managing

30   database, which is provided to each seller and registers virtual
goods information corresponding to real goods of the seller;
and a function of delivery setting, which achieves a trade
on the virtual shopping mall by setting a delivery path for
the real goods, from the seller to a buyer, when a trade between

the buyer, who is presented with the virtual goods information in the commercial goods managing database, and the seller has been established.

5   The virtual shopping mall system may further include a terminal base unit, which is installed at each of a plurality of real terminal bases that forms a physical distribution system and is connected to communicate with a virtual shopping mall operations apparatus that manages the commercial goods managing

10   database.

The virtual shopping mall system may further include: a shop managing database, which sets up a virtual shop for selling the goods for each of the sellers on the computer system;

15   and processing an owner registration procedure for sellers who want to open the virtual shop and be an owner.

The terminal base may function as a place for a seller to bring real goods and for a buyer to receive the real goods,

20   through communication information with the virtual shopping mall operations apparatus.

The virtual shopping mall system may further include generating virtual goods information, which generates virtual

25   goods information that corresponds to real goods of a seller who is an owner of a virtual shop.

The generating virtual goods information may include a media equipment device, which reads image data of real goods

30   from a recording medium.

The generating virtual goods information may include an image capturing unit, which captures an image of real goods that are brought to the terminal base by the seller.

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The generating virtual goods information may include a picture reading unit, which obtains image data of the real goods from a picture of the real goods brought in to the terminal
5   base by the seller.

The virtual shopping mall system may further include a management function, which manages information about leasing to a seller, or an owner of a virtual shop, an image capturing
10   unit, which can be used for generating virtual goods information that corresponds to real goods.

The virtual shopping mall system may further include a catalog printing apparatus, which prints out a catalog of
15   virtual goods information.

The virtual shopping mall system may further includes a search function, which searches virtual goods information of which a virtual shopping mall operations apparatus manages.
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Another aspect of the present invention is a recording medium, which stores a program that can be read by a computer. The program is a program to operate a virtual shopping mall, which includes; registering virtual goods information
25   corresponding to real goods of a seller to the virtual shopping mall by receiving the virtual goods information from the seller; intermediating business between a seller and a buyer on the virtual shopping mall by presenting the virtual goods information to the buyer; and achieving a trade on the
30   virtual shopping mall by setting a delivery path of the real goods from the seller to the buyer.

The summary of the invention does not necessarily describe all necessary features of the invention.   The present

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invention may also be a sub-combination of the features described above. The above and other features and advantages of the present invention will become more apparent from the following description of the embodiments taken in conjunction

5   with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a schematic diagram showing an entire system

10   of the present embodiment.

Fig. 2 is a view showing an image of a virtual shopping mall.

Fig. 3 is a schematic diagram showing the structure of the virtual shopping mall system.

15   Fig. 4 is a schematic diagram showing the structure of a virtual shopping mall operations apparatus.

Fig. 5 is a view showing an owner managing database.

Fig. 6 is a view showing a commercial goods managing database.

20   Fig. 7 is a view showing a shop managing database.

Fig. 8 is a view showing a business managing database.

Fig. 9 is an exemplary table of the fee system of the virtual shopping mall system.

Fig. 10 is a schematic diagram showing the structure

25   of a terminal base unit.

Fig. 11 is a perspective view of the terminal base unit.

Fig. 12 is a flowchart showing the operation of the virtual shopping mall operations apparatus.

Fig. 13 is a flowchart showing the steps of owner

30   registration in Fig. 12.

Fig. 14 is a flowchart showing the steps of commercial goods registration in Fig. 12.

Fig. 15 is a flowchart showing the process from receiving an order through to the business transaction in Fig. 12.

Fig. 16 is a flowchart showing the process of the delivery setting in Fig. 12.

Fig. 17 is a flowchart showing the process of the delivery management in Fig. 12.

5   Fig. 18 shows the flow of the sales process using the virtual shopping mall system from the standpoint of a seller.

Fig. 19 shows the flow of the purchase process using the virtual shopping mall system from the standpoint of a buyer.

Fig. 20 is the screen page of the home site of the virtual

10   shopping mall, which is displayed on the screen of the terminal base unit.

Fig. 21 is the screen page for requesting a shop owner card, which is displayed on the screen of the terminal base unit.

15   Fig. 22 is the screen page for selecting a maintenance mode, which is displayed on the screen of the terminal base unit.

Fig. 23 is the screen page for registering user information, which is displayed on the screen of the terminal

20   base unit.

Fig. 24 is the screen page for entering letters, which is displayed on the screen of the terminal base unit.

Fig. 25 is the completed screen page for registering user information, which is displayed on the screen of the

25   terminal base unit.

Fig. 26 is the screen page for ID card recognition, which is displayed on the screen of the terminal base unit.

Fig. 27 is the screen page for deciding a password, which is displayed on the screen of the terminal base unit.

30   Fig. 28 is the screen page requesting payment of the registration fee, which is displayed on the screen of the terminal base unit.

Fig. 29 is the screen page for receiving a shop owner card, which is displayed on the screen of the terminal base

unit.

Fig. 30 is the screen page for notifying the end of the user registration.

Fig. 31 is the screen page for returning a shop owner
5   card, which is displayed on the screen of the terminal base unit.

Fig. 32 is the screen page of the user's guide, which is displayed on the screen of the terminal base unit.

Fig. 33 is the screen page for entering a password, which
10 is displayed on the screen of the terminal base unit.

Fig. 34 is the screen page of the home site for registering a sales item, which is displayed on the screen of the terminal base unit.

Fig. 35 is the screen page for entering a new registration
15 of a sales item, which is displayed on the screen of the terminal base unit.

Fig. 36 is the completed screen page for entering the new registration of a sales item, which is displayed on the screen of the terminal base unit.

20   Fig. 37 is the screen page for selecting an item to see detailed information, which is displayed on the screen of the terminal base unit.

Fig. 38 is the screen page for showing detailed information of the selected item, which is displayed on the
25 screen of the terminal base unit.

Fig. 39 is the screen page for selecting a registered item to change information, which is displayed on the screen of the terminal base unit.

Fig. 40 is the screen page for changing information of
30 the selected item in Fig. 39, which is displayed on the screen of the terminal base unit.

Fig. 41 is the screen page for selecting a registered item to delete from the sale list, which is displayed on the screen of the terminal base unit.

Fig. 42 is the screen page for deleting the selected item in Fig. 41, which is displayed on the screen of the terminal base unit.

Fig. 43 is the screen page of the home site for entering an image of an item to be registered, which is displayed on the screen of the terminal base unit.

Fig. 44 is the screen page for inserting a recording medium, which is displayed on the screen of the terminal base unit.

Fig. 45 is the screen page for selecting a folder that includes image files, which is displayed on the screen of the terminal base unit.

Fig. 46 is the screen page for selecting an image file, which is displayed on the screen of the terminal base unit.

Fig. 47 is the screen page for confirming the selected image, which is displayed on the screen of the terminal base unit.

Fig. 48 is the screen page for taking a photograph with a digital camera, which is displayed on the screen of the terminal base unit.

Fig. 49 is the screen page for confirming the photographed image, which is displayed on the screen of the terminal base unit.

Fig. 50 is the screen page for scanning an image, which is displayed on the screen of the terminal base unit.

Fig. 51 is the screen page for confirming the scanned image, which is displayed on the screen of the terminal base unit.

Fig. 52 is the screen page of the home site for searching an item, which is displayed on the screen of the terminal base unit.

Fig. 53 is the completed screen page for searching an item, which is displayed on the screen of the terminal base unit.

Fig. 54 is the screen page for selecting an item for more details, which is displayed on the screen of the terminal base unit.

Fig. 55 is the screen page for showing detailed

5   information of the selected item, which is displayed on the screen of the terminal base unit.

Fig. 56 is the screen page for purchasing the selected item, which is displayed on the screen of the terminal base unit.

10   Fig. 57 is the completed screen page for purchasing the selected item, which is displayed on the screen of the terminal base unit.

Fig. 58 is the screen page for selecting a shop to receive the purchased item, which is displayed on the screen of the

15   terminal base unit.

Fig. 59 is the screen page for confirming the purchased item, which is displayed on the screen of the terminal base unit.

Fig. 60 is the screen page for notifying the end of purchase

20   process, which is displayed on the screen of the terminal base unit.

Fig. 61 is the screen page for selecting an item by the shop, which is displayed on the screen of the terminal base unit.

25   Fig. 62 is the screen page for selecting an item by the category, which is displayed on the screen of the terminal base unit.

Fig. 63 is the screen page for selecting an item by the price range, which is displayed on the screen of the terminal

30   base unit.

Fig. 64 is an exemplary discount setting table for optional use.

Fig. 65 is a flowchart showing the process for changing the contents of the registered goods.

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DETAILED DESCRIPTION OF THE INVENTION

The invention will now be described based on the preferred embodiments, which do not intend to limit the scope of the
5   present invention, but exemplify the invention. All of the features and the combinations thereof described in the embodiment are not necessarily essential to the invention.

Fig. 1 shows an overview of the present embodiment. A virtual shopping mall system includes a virtual shopping mall
10   operations apparatus E, which functions as a server. The virtual shopping mall operations apparatus E connects to a seller A and a buyer B through communication. The means of communication is the Internet in the present embodiment, for example, but any other means may be applicable.

15   The virtual shopping mall system is connected to a plurality of terminal base units installed at a plurality of terminal bases, as described later, for communication. The means for communication is an intranet, for example, but the means can be flexible. Fig. 1 shows two terminal bases C and
20   D, but a lot more terminal bases are supposed.

A plurality of terminal bases are chained to one another and form a physical distribution system. A plurality of terminal bases are preferably chain stores such as convenience stores, photo shops, restaurants, and train stations, for
25   example. In this case, the virtual shopping mall operations apparatus E may be installed at the headquarters of the convenience store. The chain stores may also be photo shops relating to the filing applicant of the present invention. However, it is obvious that the terminal base and the physical
30   distribution system are not limited to these examples described above.

In Fig. 1, the virtual shopping mall operations apparatus
E manages and operates virtual shops on a computer system.
The virtual shopping mall operations apparatus E receives
information of virtual commercial goods corresponding to real
5   commercial goods of the seller A. The virtual shopping mall
operations apparatus registers the received information. The
virtual shopping mall operations apparatus then presents the
registered information of the virtual commercial goods to the
buyer B.

10   Fig. 2 shows an image of a virtual shopping mall. Virtual
shops are set for a plurality of sellers a, b, c, and so on.
Commercial goods of sellers are registered in each virtual
shop.

         As shown in Fig. 2, a seller may either disclose the
15   name of his/her shop like sellers a, b and d, or not disclose
his/her shop like sellers c, e and f.

         Further, the size of the space for a virtual shop differs
depending on sellers, as described in Fig. 2. The size of the
space for a virtual shop is shown by the number of shelves
20   that can display commercial goods, according to the present
embodiment. The spaces for the virtual shops, or the shelves
for commercial goods, are basically certain domains on a memory
device of the virtual shopping mall operations apparatus E.
The number of shelves is set according to the fee that a seller
25   pays, which will be described later.

         Furthermore, Fig. 2 shows how each of a plurality of
the virtual shops forms a shopping mall. In contrast, one
virtual shop may provide shop spaces to a plurality of sellers
such as a department store. The whole shopping mall may also
30   be one virtual shop. On the other hand, each space in a
department store may be one virtual shop. After all, the unit

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of a virtual shop can be set freely.

Referring to Fig. 1, the virtual shopping mall operations apparatus E presents virtual shop goods information to a buyer B. The virtual shopping mall operations apparatus E then
5　intermediates a trade on a virtual shop between a seller A and the buyer B. If the trade is reached, a delivery path of real goods from the seller A to the buyer B is set. The real goods are delivered through this delivery path. The business on the virtual shops are conducted in this way.

10　According to the present invention, a buyer B is arranged to receive goods from a terminal base D, as a delivery path. The terminal base D is arranged according to the selection of a buyer B. The buyer B selects the nearest terminal base, for example. If the place where the purchased item is received
15　is predetermined, the place is arranged as a selected terminal base for receiving the purchased item.

Therefore, the goods delivery path is arranged so that a purchased item is delivered from the seller A to the designated terminal base D through a physical distribution system, by
20　passing through any one of the terminal bases, and to a buyer B.

Commercial goods are delivered from a seller A to a buyer B according to the arrangement described above. The seller A brings real commercial goods to a pre-selected terminal base
25　C. The terminal C is, for example, the nearest and most appropriate terminal base. The virtual shopping mall operations apparatus E instructs the physical distribution system to deliver the real goods from the terminal C to a terminal D. The physical distribution system delivers the real goods
30　according to the instructions. The buyer B receives the real goods at the terminal D. The buyer B then takes the real goods

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home.

The terminal base C, where a seller A brings an item
to sell, may also be arranged at the trade step on a virtual
shopping mall, as well as a terminal D. In this way, the path
5   for two bases of the physical distribution system to pass through
are arranged. The terminal C may be arranged according to the
selection of the seller A. Since the address of the seller
A is registered, the nearest terminal base from this address
may be proposed to the seller A as a place for bringing in
10   commercial goods. A place for bringing in real commercial goods
may also be previously registered for the seller A. In this
case, the registered place for bringing in goods may be arranged
as a part of the delivery path. If a place for bringing in
goods is pre-arranged, the management of delivering goods
15   becomes easier.

As described above, a method and system for operating
a virtual shopping mall of a seller-engaged type can be provided,
according to the present invention. A seller participates in
the virtual shopping mall system by using electronic
20   communication rather than establishing and managing the virtual
shop by himself/herself.

The concept of the virtual shopping mall system according
to the present invention in Fig. 1 will be detailed in the
following.

25   Fig. 3 is a block diagram showing the virtual shopping
mall system. A shopping mall operator (E) is one form of the
virtual shopping mall operations apparatus E in Fig. 1. A
terminal base and its terminal base unit is a shop and an intranet
terminal, respectively. The nearest shop (c) of the seller
30   A and the nearest shop (D) of a seller B are shown in Fig.
3 as representatives of many shops.

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The seller (A) and the buyer (B) have respective Internet
terminals. The Internet terminal is a personal computer at
home, for example. An Internet terminal can be any apparatuses
that can access the Internet such as a Personal Digital

5   Assistance or PDA and a cellular phone, for example.

The shopping mall operator (E) exists, for example, in
the headquarters of a chain store. The shopping mall operator
(E) includes an intranet server and an intranet application
for communicating with shops. The shopping mall operator (E)

10   also includes an Internet server and an Internet application
for communicating with a seller (A) and a buyer (B). The
shopping mall operator (E) further includes a database server.
The database server manages and operates virtual shops
practically as well as controlling the whole operator. The

15   shopping mall operator (E) has a shop managing database, a
trade managing database, a user managing database, and goods
managing database, for operating virtual shops. The operator
of the shopping mall operator operates a maintenance terminal.

The seller (A) may gain access to the shopping mall

20   operator (E) by using an intranet terminal of a chain store,
instead of using his/her own Internet terminal. The buyer (B)
may also gain access to the shopping mall operator (E) by using
an intranet terminal of a chain store, instead of using his/her
own Internet terminal. The intranet terminal has the necessary

25   functions for the seller (A) and the buyer (B).

Fig. 4 is a block diagram showing the detailed structure
of the virtual shopping mall operations apparatus E or the
shopping mall operator in Fig. 3. The means of communication
between shops and the seller and buyer is omitted.

30   An owner registration managing unit 10 registers a seller
as an owner of a virtual shop and manages the owner. The owner

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managing database 22 stores owner management information.

A commercial goods registration managing unit 12 receives
virtual goods information from a seller that corresponds to
real goods of the seller.   The commercial goods registration
5   managing unit 12 then registers the received virtual goods
information to a virtual shop and manages the registered
information.   A commercial goods managing database 24 stores
virtual goods information.

A commercial goods inspection processing unit 14 checks
10   virtual goods information and judges whether or not registering
the virtual goods information to a virtual shop is appropriate.
The inspection may be both before and after the registration.
If the inspection process is undertaken after registration,
the registered item may be deleted or the presentation of the
15   item may be limited, according to the judging results.

A business intermediation processing unit 16
intermediates businesses on virtual shops between sellers and
buyers.   The business intermediation processing unit 16
undertakes processes, such as presenting items for sale,
20   receiving orders, confirming the stock, and issuing business
IDs.   The details will be described later.   If a trade between
a seller and a buyer is reached, a delivery setting unit 18
sets a delivery path for delivering commercial goods.   A
delivery managing unit 20 then manages the delivering of real
25   commercial goods through the delivery path.   A shop managing
database 26 and a business managing database 28 are used in
the processes from the business intermediation to the delivery
management.

Figs. 5, 6, 7, and 8 exemplifies the owner managing
30   database 22, the commercial goods managing database 24, the
shop managing database 26, and business managing database 28,

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respectively.

The owner managing database 22 stores owner management
information such as identification information and addresses.
The commercial goods managing database 24 stores various
5   commercial goods information registered by sellers. The
commercial goods managing database 24 also stores image data
of commercial goods. The shop managing database 26 stores
information, such as addresses of each shop. The business
managing database 28 stores the contents and statuses of each
10   trade.

The owner managing database 22 and the commercial goods
managing database 24 decide a seller and his/her item for sale
and form a virtual shop as shown in Fig. 2. The "NUMBER OF
SHELVES" in the owner managing database 22 shows the space
15   for a shop as previously described. The number of shelves is
set according to the fee that an owner pays.

Fig. 9 is an exemplary table of the fee system for the
virtual shopping mall system. The basic fees for a virtual
shop are classified into three levels of S, M, and L, according
20   to the number of shelves that a seller uses. Fees for each
trade are arranged according to the amount of money traded.

A number showing the progress of trade of the business
managing database 28 in Fig. 8, is set, for example, based
on the following rule. 1: generation of a trade, 2: stock
25   confirmed, 3: commercial goods have been sent from the seller's
nearest shop, 4: arrival of the commercial goods at the buyer's
nearest shop, 5: the buyer has received the commercial goods,
-1: suspension of the process by a problem, and -2: cancellation
of trade.

30   Terminal base units installed at terminal bases or the

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intranet terminal in Fig. 3 will be described in the following.

Fig. 10 shows the structure of the terminal base unit. Basic functions of the terminal base unit are the registration of owners and management of bringing and receiving goods.

5   Further, according to the present invention, the terminal base unit includes a function relating to a seller's registration of goods and a function relating to a buyer's purchase of goods. These functions make it possible for sellers and buyers to use a terminal base unit instead of their own terminal.

10   In Fig. 10, an owner registration processing unit 40, as well as the virtual shopping mall operations apparatus E, undertakes the process of owner registration for sellers who want to be an owner of a virtual shop. In this way, a seller basically registers an ownership by directly visiting a shop

15   where a terminal base unit is installed. A seller may undertakes the process of owner registration by using his/her own terminal, as another example of the present embodiment.

A real goods delivery managing unit 42 functions when a seller brings an item for sale to a terminal base. The seller

20   brings to a terminal base an item for sale as well as a trade ID, such as identification information, numbers, letters, signs, and combinations of this information. The real goods delivery managing unit 42 sends a trade ID to the virtual shopping mall operations apparatus E and inquires about the destination of

25   the shipping goods. The virtual shopping mall operations apparatus E replies with the destination terminal base of the shipping goods. The real goods delivery managing unit 42 sends the shipping goods to the specified destination. The real goods delivery managing unit 42 then notifies the end of shipment

30   to the virtual shopping mall operations apparatus E.

If a terminal base is previously designated as a place

for bringing an item for sale before a seller brings the item, a trade ID and a destination of shipping are preferably notified to the terminal base. When the item is brought to the terminal base, the trade ID is confirmed, the item is promptly shipped,

5 and the virtual shopping mall operations apparatus E is notified the end of shipping process.

On the other hand, a real goods receiving managing unit 44 functions when a terminal base is designated as a place for receiving a sale item. The real goods receiving managing

10 unit 44 manages the arrival of goods to a terminal base. The virtual shopping mall operations apparatus E is notified of the arrival of the item. The real goods receiving managing unit 44 further manages the receiving of the item by a buyer. The virtual shopping mall operations apparatus E is also

15 notified of the end of trade. The virtual shopping mall operations apparatus E is also notified of the status of management periodically.

A commercial goods registration processing unit 46, together with the virtual shopping mall operations apparatus

20 E, registers to a virtual shop, virtual shop information corresponding to real goods of a seller. Specifically, the commercial goods registration processing unit 46 sends the virtual shopping mall operations apparatus E virtual shop information as well as identification information of a seller.

25 The commercial goods registration processing unit 46 then requests registration of commercial goods information. The commercial goods registration processing unit 46 then receives from the virtual shopping mall operations apparatus E, a notice notifying the end of goods registration.

30 A virtual goods information generating unit 48 generates virtual goods information for sellers. Virtual goods information preferably includes image data of commercial goods.

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Image data is obtained by using a media equipment unit 50,
an image capturing device 52, or a scanner 54. If a seller
brings a recording medium that records image data of sale items,
the recording media will be equipped to the media equipment
5   unit 50 and image data is read. If a seller brings a real item,
the image capturing device 52, preferably a digital camera,
takes a photograph image of the real item. If a seller brings
a picture of real goods, the scanner 54 as a photograph imaging
device generates image data from the picture.

10   A camera lease managing unit 56 manages the status of
leasing a camera, or an image capturing device, to sellers.
A seller takes the leased camera home and takes a photograph
of an item for sale by himself/herself. The seller may transfer
the photographed image to his/her own terminal and upload the
15   image to his/her virtual shop. As it is obvious from the
description above, a digital camera is preferably used.

A catalog printing unit 58 prints out catalogs of virtual
shops by using a printer 60. This function is used by both
sellers and buyers. A seller prints a catalog of his/her items
20   for sale registered to his/her virtual shop when he/she wants
to use a medium other than the Internet, such as direct mail
or an insert. A buyer gets a print on the result of the searched
items or information of the purchased item.

A shop original site creating unit 62 provides a service
25   for creating an original site of a shop for sellers. This
service may target sellers who contracted a virtual shop to
be of a bigger size than a given size.

A commercial goods purchase processing unit 64 is set
for buyers who want to shop at a virtual shop. A buyer can
30   search a desired item at a virtual shop by using this function.

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Fig. 11 shows the external appearance of the terminal
base unit. A user operates an application by using a touch
panel display. A special pen may be used as well as fingers.
A slot for inserting an ID card is set and used for certification
5   of a registered owner. The slot may also be used for issuing
an ID card for a new owner.

Further, the terminal base unit includes various media
drives that can read and write image data, a digital camera
for capturing images, and a flatbed scanner for reading images.
10   The terminal base unit may be equiped with an inserted camera
instead of a digital camera. Slots for inserting and returning
coins and bills are used for paying an owner registration fee.

The structure of the terminal base unit is described
above. Moreover, the unit for the sales clerks of a chain store
15   to operate, and the unit for sellers and buyers to operate,
may be installed independently. Both the sales clerks and
sellers and buyers may also operate the same unit.

The operation of the virtual shopping mall system will
be described in the following. Fig. 12 is a flowchart showing
20   the complete operation of the virtual shopping mall operations
apparatus E. First, the virtual shopping mall operations
apparatus E registers a seller, who wants to be an owner of
a virtual shopping mall, as an owner at step S10. The owner
managing database 22 stores owner information. The management
25   information will be rewritten according to the contacts made
by the owner at a later time. An owner can be deleted from
the registration.

After the owner registration, the virtual shopping mall
operations apparatus E accepts virtual goods information from
30   a seller and registers the information to a virtual shop, at
step S20. The registered item will be presented to a buyer

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by using the Internet, at step S30. Then, the processes from
receiving an order from a buyer through to trading are undertaken,
at step S40. The trade between a seller and a buyer on a virtual
shop is intermediated here.

5   When a trade on a virtual shop is reached, a delivery
path of a purchased item is arranged, at step S50. Here, the
shop for a buyer to receive the item is arranged. The delivering
of the physical distribution system is managed so that the
purchased items are moved along the delivery path, at step
10   S60. Therefore, a purchased item is delivered from a shop,
where a seller brought an item, to a designated shop. Also,
at step S50, a seller may arrange a shop for bringing an item.
In this case, an item is moved via two designated shops.

          Figs. 13, 14, 15, 16, and 17 show the details of each
15   step in Fig. 12, respectively. Fig. 13 shows an owner
registration step of Fig. 12. The virtual shop operations
apparatus E receives from a terminal base unit, a notice that
says a virtual shop space, which is a space for a catalog of
commercial goods, was sold to a seller, at step S12.
20   Identification information of a seller is included in the
received information. The size of a virtual shop or the number
of shelves may be set at this stage. Otherwise, a seller may
select the size of the shop separately using his/her own
terminal.

25   When the virtual shopping mall operations apparatus E
receives a notice of sale for a virtual shop space, the apparatus
records owner management information as well as reserving a
virtual shop space in the commercial goods managing database
24, at step S14. Then, a space reservation notice, which is
30   a notification of the opening of a virtual shop, is sent to
an owner, at step S16.

Fig. 14 shows the process of registering commercial goods in Fig. 12. The virtual shopping mall operations apparatus E receives virtual goods information from a seller, at step S22. The virtual goods information is then inspected, at

5   step S24. If the information passes the inspection, the virtual goods information is placed directly in a virtual shop space and is exhibited to buyers, at step S26. If the information does not pass inspection, the publication of the item is limited and a penalty according to predetermined penalty rules is

10 undertaken, at step S28.

In the inspection process, whether or not registering the virtual goods information to a virtual shop is appropriate is judged. In particular, whether or not the intent of the virtual goods information agrees with the intent of an operator

15 of the virtual shopping mall is judged. It is desirable to predetermine what kind of goods do not agree with the operator.

The inspection process may be undertaken automatically. The inspection process may also be a process that presents virtual goods information to the operator and outputs the result

20 of judgment. Further, the first step of a pre-detailed judgment based on image data or text data may be undertaken by a computer. Then, the second step of a detailed judgment may be undertaken by the operator.

For the automatic inspection process, a keyword search

25 for inspection may be used, for example. If this keyword hits the text data relating to the item, it is judged that the registration of the item is inappropriate. This process acts as a kind of filtering process.

Text data may be checked by a computer using the keyword

30 search described above and image data may be presented to the operator. Image data may be checked by a computer. By applying

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a photo developing technique, whether or not the
appropriateness of the image can be judged.   An extremely dark
image or an unclear image, for example, is detected.

5   If the image does not pass the inspection, the
presentation of the virtual goods information will be limited.
In that case, the limitation of the presentation may be an
absolute ban or a partial ban.   Also, penalty rules may be set
in a step-by-step basis.   For example, a warning can be given
for the first breach, a penalty fee can be charged for the
10   second breach, and a contract can be terminated for the third
breach.

        If the seller wants to change the contents of the
registered goods, corrections may be made by the following
process as described in Fig. 65.   First, the seller decides
15   whether to select an image picture, at step S70.   If the seller
selects an image picture, the "change" page in Fig. 40 is
displayed, at step S76.   If the seller does not select an image
picture and presses the cancel button, the "goods registration"
page in Fig. 34 is displayed, at step S74.   If the seller wants
20   to change letters of the contents, at step S78, the seller
changes the contents by selecting letters using Fig. 24, at
step S80.   If the seller wants to change the image picture,
the seller selects a medium or a device for inputting image
picture, at step S82.   The terminal base unit then inputs an
25   image picture, at step S84.   The terminal base unit demagnifies
the image picture to dispose a plurality of items in one frame,
at step S86.   The terminal base unit presents the demagnified
image picture to the seller, at step S88.   After changing the
contents, the seller checks the changed parts, at step S90.
30   If the seller is satisfied with the changed contents, at step
S92, the seller presses the OK button, at step S96.   Then, the
registration of the changed contents is completed, at step

S98, and the screen page returns to the page for selecting
an image picture in Fig. 39, at step S100. If the seller is
not satisfied with the changed contents, the seller presses
the cancel button, at step S94. The screen page then returns

5   to the page for selecting an image picture in Fig. 39, at step
S100.

Fig. 15 shows the process from acceptance of an order
to trading. When the virtual shopping mall operations
apparatus E receives an order from a buyer at step S42, the

10   apparatus obtains confirmation of the stock from the seller
at step S44. If the goods are not in stock, at step S46, N,
trade is not reached, at step S48. If the goods are in stock,
at step S46, Y, the trade is reached and a trade ID is issued,
at step S49.

15   Fig. 16 shows an exemplary process of a delivery
arrangement in Fig. 12. The virtual shopping mall operations
apparatus E arranges a shop for goods to be received by a buyer.
First, the virtual shopping mall operations apparatus E
requests a buyer to select a shop for receiving goods, at step

20   S52. The virtual shopping mall operations apparatus E then
selects a shop for receiving goods in response to this request,
at step S54. For example, a list of shops is sent from the
virtual shopping mall operations apparatus E to a buyer and
is displayed on a terminal. A buyer selects a desired shop

25   from the list of shops. When the address of a buyer is revealed,
the nearest shop may be recommended as a default shop for
receiving the goods. When a buyer selects a shop, the selected
shop is arranged as the shop for receiving the goods, at step
S56.

30   A shop for a seller to bring in goods may not be
pre-designated. If the virtual shopping mall operations
apparatus E arranges a shop for bringing in goods, the same

process as described above can be undertaken. A shop for
bringing in goods may be registered for each seller. The shop
that undertook the owner registration may be initially
registered as the shop for bringing in goods, for example.

5   The process of delivery arrangement is preferably
undertaken during the trading process described above. For
example, when an order of goods is sent to the virtual shopping
mall operations apparatus E, the result of the selection of
a shop for receiving goods is sent 'as well.

10   Fig. 17 shows the process of delivery management in Fig.
12. The trade ID issued at the time of a deal is notified to
a seller, at step S61. The trade ID is further notified to
the shop where a buyer is supposed to receive goods, at step
S62. An e-mail may be used for notifying a trade ID. Telephones
15 and faxes may also be used for notifying a trade ID. When the
seller A brings goods and a trade ID to the nearest shop, there
is an inquiry of destination of the goods from the shop to
the virtual shopping mall operations apparatus E, at step S63.
When the virtual shopping mall operations apparatus E informs
20 the shop of the destination, the virtual shopping mall
operations apparatus E receives a notice showing the end of
the shipping process of the goods, at step S64.

When the goods arrive at the destination, or the shop
for receiving the goods, an arrival notice is sent from the
25 shop to the virtual shopping mall operations apparatus E, at
step S65. The virtual shopping mall operations apparatus E
notifies the arrival and a trade ID to a buyer, at step S66.
When a buyer receives the goods at the shop, the shop sends
the virtual shopping mall operations apparatus a notice for
30 notifying the end of the trade, at step S67. The process
finishes when the goods are delivered.

Fig. 18 shows the flow of selling goods mainly from the seller's side. (1) The opening of a virtual shop: A seller goes to the nearest shop and purchases a virtual shop space by using a terminal base unit. The seller is then registered

5   as an owner of a virtual shop. At registration, an ID card is issued to prevent problems and for the trade safety. After owner registration, a notice for notifying the opening, or a notice for reserving a space is sent to the seller by e-mail.

(2) The registration of goods: The seller registers goods

10   to a virtual shop. Each seller undertakes this registration operation by himself/herself using his/her own terminal. A seller may visit a chain store and use a terminal base unit. The number of items that a seller can register at any one time is limited to the number of shelves of a store. The deletion

15   of registration is undertaken by using a terminal.

(3) The checking of the registration contents: This procedure corresponds to the inspection process described previously. A newly registered item is checked and then judged whether or not to exhibit the item. The judgment result whether

20   or not to exhibit is notified to a seller automatically by e-mail. When a seller requests to delete a registered item, the data of the item is deleted after confirming that no trade is presently made on the corresponding item.

(4) The exhibition of goods: Goods of the seller are

25   exhibited on a virtual shop on the Internet.

(5) The trade of goods: When a buyer sends an order to a virtual shop, the virtual shopping mall operations apparatus E automatically sends an order mail to the seller. The seller checks the stock of the corresponding item. If the item is

30   in stock, a seller communicates to the virtual shopping mall operations apparatus E by e-mail that the item is in stock.

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The seller then receives a trade ID, which a virtual shop has
issued, by e-mail. The trade ID is also issued to the buyer.

(6) The sale of goods: The seller brings an item for
sale to the nearest shop and presents a trade ID to a sales
5   clerk of the shop. The seller receives payment in exchange
for the item. Since a buyer pays at a shop, the payment process
is very safe. The payment is the amount with shipping and
handling being deducted from the total fee. The shipping and
handling may be paid separately. An electronic payment may
10   be used.

Fig. 19 shows the flow of purchasing goods mainly from
the buyer's side. (1) Accessing a virtual shop: A buyer visits
the Web site of an operator of the virtual shopping mall by
using a terminal that can gain access to the Internet, such
15   as a personal computer or a cellular phone. A buyer is not
required to register a membership specifically.

(2) Searching goods: A buyer searches desired goods on
the Web site. The buyer is then presented with the desired
goods.

20   (3) Ordering goods: When the buyer finds the desired
goods, the buyer presses the order button on a terminal. When
the screen page for selecting a shop is displayed in response
to this operation, the buyer selects an appropriate shop as
a place for receiving the purchased goods. When a buyer makes
25   an order, the buyer discloses his/her e-mail address to the
virtual shopping mall operations apparatus E by using a terminal
base unit.

(4) Notifying the stock: The buyer receives a notice
of whether or not the goods are in stock. Checking the stock
30   is undertaken between the operator of the virtual shopping

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mall and the seller.   If the goods are in stock, the buyer enters
into the waiting state of delivery.   If the goods are not in
stock, no trade is reached.

        (5) The notice for arrival of the purchased goods: The
5   buyer receives an e-mail that notifies the arrival of the
purchased goods at the designated shop.   This e-mail includes
a trade ID.

        (6) Purchasing goods: The buyer visits the designated
shop to receive the purchased goods, taking the trade ID with
10 him/her.   The buyer presents the trade ID to a sales clerk,
receives the purchased goods, and makes the payment.   The
payment is transmitted to an appropriate place, such as the
headquarters of the chain store.

        As described above, according to the present invention,
15 a catalog of commercial goods as a virtual shopping mall, a
window for accepting requests to edit a catalog, a window for
accepting an order of goods, and an information center for
various question inquiries, exist on the Internet as a unit
from sellers' and buyers' point of view.

20   From Figs. 20 to 63 are various screen pages, which are
displayed on a terminal base unit installed at a chain store.
By referring to these figures, various functions of the terminal
base unit and the virtual shopping mall system will be described
in the following.   The main functions of the terminal base unit
25 is "the owner registration," "the goods registration," "the
obtaining of images for registering goods," "the searching
of goods," and "the ordering of goods."

        Fig. 20 is the screen page of the home site of the virtual
shopping mall.   The screen page switches to another page
30 according to what button a user selects.   Therefore, when a

seller presses the user's guide button, the goods search button,
or the goods registration button, the "user's guide" page as
in Fig. 32, the "goods search" page as in Fig. 52, or the "request
for a shop owner card" page as in Fig. 21 will be displayed

5   on the screen, respectively.

    Fig. 21 is the screen page for requesting a shop owner
card. If a seller is already an owner of a virtual shop, the
seller inserts his/her owner card into a predetermined card
slot. If a seller registers himself/herself as an owner for

10   the first time, the seller inserts a maintenance card, which
is used for managing virtual shops. When a seller inserts an
owner card, the "user certification" page as in Fig. 33 will
be displayed. When a user inserts a maintenance card, the
"maintenance mode" page as in Fig. 22 will be displayed. When

15   a seller presses the user's guide button, the "user's guide"
page as in Fig. 32 will be displayed. When a seller presses
the cancel button, the "home site" page as in Fig. 20 will
be displayed.

    Fig. 22 is the screen page for selecting a maintenance

20   mode. A new owner is registered in this maintenance mode. A
sales clerk of a shop may undertake this registration operation.
Otherwise, a seller, who is going to be an owner, may undertake
this operation. If a seller presses the user registration
button, which corresponds to the owner registration, the "user

25   registration" page as in Fig. 23 will be displayed. If a seller
presses the end button, a page that asks the seller to receive
an owner card as in Fig. 31 will be displayed. The shop owner
card is then ejected from the card slot.

    Fig. 23 is the screen page for registering user

30   information. When an operator, that is, a seller or a sales
clerk, presses each item, the page for entering letters as
in Fig. 24 will be displayed. A seller enters letters by using

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this screen page. When a seller finishes entering letters,
that is, when the OK button is pressed, the screen page as
in Fig. 23 will be displayed again.

5   Fig. 24 is the screen page for entering letters. This
screen page is for entering letters using a terminal base unit
at a shop, which does not have a keyboard. A user selects a
letter by moving a cursor using the arrows placed at the middle
right side. The use of this page is not limited to the entry
of user information. This screen page is used for every
10   operation where it is necessary to enter letters.

        Fig. 25 is the second screen page for registering user
information. This screen page shows the completed form of Fig.
23. If a seller presses the OK Button, a "user registration"
page as in Fig. 26 will be displayed. If a seller presses
15   the cancel button, the "maintenance mode" page as in Fig. 22
will be displayed.

        Fig. 26 is the screen page for recognizing an ID card.
If an operator places an ID card on the flatbed scanner of
the terminal base unit and presses the OK button, the scanned
20   image will be accepted. The "user registration" page for
deciding a password as in Fig. 27 will also be displayed if
an operator presses the OK button. If an operator presses the
cancel button, the "maintenance mode" page as in Fig 22 will
be displayed.

25   Fig. 27 is the screen page for deciding a password. A
seller decides a four-digit password and inputs the password.
The password is used for the authentication at the time of
goods registration and so on. If a seller presses the OK button,
a "user registration" page for requesting payment of the
30   registration fee as in Fig. 28 will be displayed. If a seller
presses the cancel button, the "maintenance mode" page as in

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Fig. 22 will be displayed.

Fig. 28 is the screen page for requesting payment of the registration fee. A seller pays the requested registration fee. When a seller completes payment, a "user registration"

5   page for issuing a shop owner card as in Fig. 29 will be displayed. If a seller presses the cancel button, the "maintenance mode" page as in Fig. 22 will be displayed.

Fig. 29 is the screen page for issuing a shop owner card. A seller receives a shop owner card as issued by a terminal

10 base unit. After a seller receives a shop owner card, the "user registration" page for notifying the completion of the registration as in Fig. 30 will be displayed.

Fig. 30 is the screen page for notifying the completion of the user registration. An ID number of a new owner is issued

15 at this page. The ID number is a ten-digit number, which is a combination of the displayed six-digit number plus the seller's four-digit password. If a seller presses the OK button, the " maintenance mode" page as in Fig. 22 will be displayed.

Fig. 31 is the screen page for returning a shop owner

20 card. A shop owner card or a maintenance card is ejected from the terminal base unit and is returned to a seller. When an operator receives a card, the "home site" page will be displayed.

Fig. 32 is the screen page of the "user's guide". Information of how to use this service, or a virtual shopping

25 mall, is described in this page. If an operator presses the back button, the former page will be displayed.

Screen pages from Fig. 33 and onwards are used for registering goods. Fig. 33 is the screen page for inputting a password to authenticate a user. A seller inputs his/her

four-digit password.   Since a shop owner card has been already
inserted, a seller does not need to input the entire ten-digit
ID number.   If a seller presses the OK button, the home site
of the "goods registration" page as in Fig. 34 will be displayed.
5   If a seller presses the cancel button, the page for returning
a shop owner card as in Fig. 31 will be displayed.

Fig. 34 is the screen page of the home site for registering
a sales item.   This page shows the menu used for managing the
registration of goods.   The screen page switches to another
10   page according to the operation of buttons.   If a seller presses
the new registration button, the "new registration" page for
registering new goods as in Fig. 35 will be displayed.   If a
seller presses the confirmation button, the "confirmation"
page for confirming goods as in Fig. 37 will be displayed.
15   If a seller presses the change button, the "change" page for
selecting an item to change as in Fig. 39 will be displayed.
If a seller presses the delete button, the "deletion" page
for selecting an item to delete as in Fig. 41 will be displayed.
If a seller presses the user's guide button, the "user's guide"
20   page as in Fig. 32 will be displayed.   And if a seller presses
the end button, the page for requesting to receive a shop owner
card as in Fig. 31 will be displayed.

Fig. 35 is the first screen page for a new registration
of a sales item.   A seller registers data of new registering
25   goods.   A seller inputs letters into each column of the name
of goods, the price, and the comment, by using the page for
inputting letters as in Fig. 24.   A seller selects YES or NO
for the column of "disclosure of shop name," depending on whether
or not a seller wants anonymity.   If a seller presses the change
30   button, the "image input" page for entering an image of an
item to register as in Fig. 43 will be displayed.   The operation
of inputting image pictures then follows.   When the inputting

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of images is completed, the screen page of Fig. 35 will be
displayed again.

Fig. 36 is the second screen page for the new registration
of a sales item.   The inputting of all the blank spaces including
5   images is completed.   If a seller presses the OK button, the
home site of the "goods registration" page as in Fig. 34 will
be displayed.   If a seller presses the cancel button, the home
site of the "goods registration" page as in Fig. 34 will also
be displayed.

10   Fig. 37 is the screen page for selecting an item to see
detailed information.   A seller designates a picture item of
goods for more information.   If a seller selects an image item,
the "detailed information" page as in Fig. 38 will be displayed.
If a seller presses the cancel button, the home site of the
15   "goods registration" page as in Fig. 34 will be displayed.

Fig. 38 is the screen page for showing detailed
information of the selected item.   The detailed information
of registered goods is displayed.   If a seller presses the back
button, the "confirmation" page as in Fig. 37 will be displayed.

20   Fig. 39 is the screen page for selecting a registered
item to change information.   A seller designates an image
picture of goods to change the information contents.   If a
seller selects an image picture, the "change" page for changing
the contents as in Fig. 40 will be displayed.   If a seller presses
25   the cancel button, the home site of the "goods registration"
page as in Fig. 34 will be displayed.

Fig. 40 is the screen page for changing selected item
information.   The registered goods information is displayed
in this page.   A seller changes the contents of the column which
30   the seller wants to change.   A seller then presses the OK button.

For changing the letters, the page for inputting letters as in Fig. 24 is used. For changing an image picture, the "image input" page as in Fig. 43 is used. If a seller presses the OK button, the "change" page as in Fig. 39 will be displayed.

5 If a seller presses the cancel button, the "change" page as in Fig. 39 will also be displayed.

Fig. 41 is the screen page for selecting a registered item to be deleted from the sale list. A seller designates an image picture of goods to be deleted from the sale list.

10 If a seller selects an image picture, the "detailed information" page for confirming deletion of the item as in Fig. 42 will be displayed. IF a seller presses the cancel button, the home site of the "goods registration" page as in Fig. 34 will be displayed.

15 Fig. 42 is the screen page for deleting the selected item in Fig. 41. The information of registered goods is displayed in this page. When a seller deletes an item, the seller presses the OK button. If a seller presses the OK button, the "deletion" page for selecting an item to be deleted as

20 in Fig. 41 will be displayed. If a seller presses the cancel button, the "deletion" page as in Fig. 41 will also be displayed.

Fig. 43 is the screen page of the home site for entering an image of an item for registration. This screen page shows the menu of media and devices and is used for inputting image

25 pictures. Images are input from media, such as a memory card and flexible disk, a camera, or a scanner.

The Fig. 43 page is switched to another page according to the operation of the buttons. If a seller presses a medium button, such as smart media button, zip button, and FLOPPY

30 DISK button, the "media insert" page as in Fig. 44 will be displayed. If a seller presses the digital camera button, the

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"input by camera" page as in Fig. 48 will be displayed. If
a seller presses the scanner button, the "input by scanner"
page as in Fig. 50 will be displayed. And if a seller presses
the cancel button, the former page will be displayed.

5   Fig. 44 is the screen page for inserting a recording
medium. A seller inserts a medium into the designated drive
and presses the OK button. If a seller presses the OK button,
the "media insert" page for selecting a folder as in Fig. 45
will be displayed. If a seller presses the cancel button, the
10   "image input" page as in Fig. 43 will be displayed again.

        Fig. 45 is the screen page for selecting a folder that
includes image files. A seller selects a folder that stores
the desired image data file and presses the OK button. If a
seller presses the OK button, the "media insert" page for
15   selecting a file as in Fig. 46 will be displayed. If a seller
presses the cancel button, the "media insert" button as in
Fig. 44 will be displayed.

        Fig. 46 is the screen page for selecting an image file.
Images in the selected folder are shown by a list. A seller
20   selects a desired image from the list. If a seller selects
an image, the "media insert" page for confirming the image
as in Fig. 47 will be displayed. If a seller presses the cancel
button, the "media insert" page for selecting a folder as in
Fig. 45 will be displayed again.

25   Fig. 47 is the screen page for confirming the selected
image. If a seller confirms an image and presses the OK button,
a screen page to continue the proceedings will be displayed.
If a seller presses the cancel button, the "media insert" page
for selecting a file as in Fig. 46 will be displayed.

30   Fig. 48 is the screen page for taking a photograph with

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a digital camera. A seller takes a photograph of goods with a digital camera installed on the terminal base unit at a shop, according to the screen page instructions. The image transferred from the digital camera will be displayed in real

5   time on the screen of the terminal base unit, by the through process. If the photographing operation is conducted, the "input by camera" page for checking a taken image as in Fig. 49 will be displayed. If a seller presses the cancel button, the "image input" page as in Fig. 43 will be displayed.

10   Fig. 49 is the screen page for confirming the photographed image. If a seller checks the image picture and presses the OK button, a screen page to continue the proceedings will be displayed. If a seller presses the cancel button, the "input by camera" page for taking a photograph as in Fig. 48 will

15   be displayed.

Fig. 50 is the screen page for scanning an image. A seller places a photograph of goods on the scanner installed on the terminal base unit. The scanner then accepts the image data of the picture. If an image is accepted, the "input by scanner" page for checking the scanned image as in Fig. 51 will be

20   page for checking the scanned image as in Fig. 51 will be displayed. If a seller presses the cancel button, the "image input" page as in Fig. 43 will be displayed.

Fig. 51 is the screen page for confirming the scanned image. If a seller confirms the scanned image and presses the

25   OK button, a screen page to continue the proceedings will be displayed. If a seller presses the cancel button, the "input by scanner" page for placing a picture as in Fig. 50 will be displayed.

Fig. 52 to Fig. 60 are used for searching and purchasing

30   goods. The following figures show the buyer functions.

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Fig. 52 is the first screen page of the home site for searching an item. The process for a buyer to be presented goods starts from here. A buyer inputs conditions into blank spaces for each item to search a specific item. When a buyer

5   inputs keywords, keywords will be searched from among the named goods, the named shop, and the comments. Each item of the named goods, the named shop, the price, and the keyword is connected with "AND" in the search style. A buyer does not need to complete all of the items.

10   The category column is used for designating the category of the goods list. A buyer can select from the five modes of "no category," "shop," "category," "sale date," and "price."

Fig. 53 is the second screen page for searching an item. This screen page shows the completed search conditions made

15   by a buyer. If a buyer presses the OK button, a goods list according to the category selection will be displayed. Here, it is supposed that a buyer selected "no category." In this case, the " list of goods" page as in Fig. 54 will be displayed. The other goods lists will be described later. If a buyer

20   presses the cancel button, the home site of the virtual shopping mall as in Fig. 20 will be displayed.

Fig. 54 is the screen page for selecting an item for more details. A buyer designates an image of an item for more detailed information. Other lists of items are displayed

25   according to the operation of the back button and the next button. If a buyer designates an image of an item, the "detailed information" page as in Fig. 55 will be displayed. If a buyer presses the cancel button, the "goods search" page as in Fig. 52 will be displayed.

30   Fig. 55 is the screen page for showing the selected item information in detail. A buyer looks at the detailed

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information and decides whether or not to purchase the item. If a buyer selects the item, the "purchase of goods" page as in Fig. 56 will be displayed. If a buyer presses the back button, the "list of goods" page as in Fig. 54 will be displayed.

5   Fig. 56 is the first screen page for purchasing the selected item. A buyer inputs his/her e-mail address and telephone number.

Fig. 57 is the second screen page for purchasing the selected item. This screen page shows the completed state of
10   the e-mail address and telephone number. A buyer designates a receiving shop for receiving the purchased item. If a buyer selects the shop where the buyer is operating the terminal base unit, the buyer selects the "receive at this shop" button. If a buyer selects the "receive at this shop" button, the
15   "confirmation of purchase" page as in Fig. 59 will be displayed. If a buyer selects the "receive at another shop" button, the "shop selection" page as in Fig. 58 will be displayed.

Fig. 58 is the screen page for selecting a shop to receive the purchased item. A buyer selects a shop to receive the
20   purchased item. If a buyer selects a shop, the "confirmation of purchase" page as in Fig. 59 will be displayed. If a buyer presses the back button, the "purchase of goods" page as in Fig. 56 will be displayed.

Fig. 59 is the screen page for confirming the purchased
25   item. A buyer confirms the item and presses the OK button. If a buyer presses the OK button, the "your purchase has been completed" page as in Fig. 60 will be displayed. If a buyer presses the cancel button, the "detailed information" page as in Fig. 55 will be displayed.

30   Fig. 60 is the screen page for notifying the end of purchase

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proceedings. The terminal base unit issues a trade ID to a
buyer. The purchase proceedings are then completed. If a
buyer presses the OK button, the "goods search" page as in
Fig. 52 will be displayed.

5   Fig. 61 to Fig. 63 are examples of other displays for
goods lists.

        Fig. 61 is the screen page for selecting an item by the
shop. This page is shown when a buyer selects the "shop"
category in the "goods search" page in Fig. 52. The list of
10   goods is categorized in each shop. One of the images of the
registered goods is displayed as a representative image for
each shop. If a buyer selects an image, the item corresponding
to the searched conditions will be displayed by selecting from
the groups of goods registered in the corresponding shop.

15   A buyer can further select the rest of the categories
of "no category," "sale date," and "price" in the screen page
of Fig. 61. If a buyer selects other than "no category," a
screen page listing goods that categorized the items of the
corresponding shop by designated item, will be displayed.
20   These further processes of categorizing will be conducted in
the same way as to the other category items in the following.

        Fig. 62 is the screen page for selecting an item by category.
This page is shown when a buyer selects the "category" for
the category in the "goods search" page in Fig. 52. The list
25   of goods categorized in each category will be displayed. If
a buyer selects an image, the item corresponding to the searched
conditions will be displayed by selecting from the groups of
goods registered in the corresponding shop.

        Fig. 63 is the screen page for selecting an item by the
30   price range. This page is shown when a buyer selects the "price"

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for the category in the "goods search" page in Fig. 52. The
list of goods categorized in each price range will be displayed.
If a buyer selects an image, the item corresponding to the
searched conditions will be displayed by selecting from the

5   groups of goods registered in the corresponding shop. Although
the figure about the category "sale date" is not shown, it
will be basically the same as the other category.

Each function of a terminal base unit of a chain store
has been described above based on screen pages using Graphical

10 User Interface, or GUI, relating to each function, though it
is only one aspect of a terminal base unit.

Common functions between terminals of sellers and buyers
are included in the functions of a terminal base unit described
above. Those common functions include goods registration,

15 searching goods, and ordering goods. These functions can be
achieved by a terminal of both a seller and a buyer, by gaining
access to a virtual shop. Even if the terminal is different,
since the functional aspect is the same for both sellers and
buyers, the description is omitted.

20   "Image database engine"

In order to achieve these plentiful functions on a
terminal, it is preferable that a server as a virtual shopping
mall operations apparatus has a high-quality image database
engine. An image database engine of communication type that

25 takes advantage of the Web environment may be preferably
applicable.

The image database engine preferably includes such
functions as registering, searching, deleting, and editing
images. Such database engine, as a user can easily use these

30 functions through the Internet by using a Web browser, is

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preferable.   For example, a seller can easily register, delete, and edit images of goods.   A buyer can easily search images of goods.

It is preferable that an image database engine includes
5   a grouping function, which makes it possible to change the category of an image dynamically.   This function makes it possible for a terminal to display a list of goods images by each category as shown in Figs. 53, 62, and 63.   In Fig. 53, shop, category, sale date, and price range are shown as examples
10   of categories.   Groups of goods can be recomposed dynamically by the grouping function.   It is preferable that the grouping function can categorize images according to the tree structure, or hierarchical structure, based on a plurality of categorizing items.

15   The database engine may further include functions such as limiting access, customizing databases, and customizing displays.   Moreover, a library program, which adapts to the database engine described above, is preferably used for the development of applications for a virtual shopping mall
20   operations apparatus.

<Option>

Other various optional functions will be described in the following.

"Cooling-off policy"

25   If a buyer requests a cooling-off, the purchased item will be returned from the buyer to the seller.   A virtual shopping mall operations apparatus promotes the return in the same way as the delivering of goods, although the process will be the opposite.   In order to proceed a cooling-off, expenses,

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such as shipment, will arise. Therefore, predetermined charges may be set based on the predictable incidence of cooling-off. That is, charges are added to cover costs such as shipment.

5   "Measures for tricks made by buyers"

A buyer may intentionally order goods to a virtual shop without a will to purchase. In this case, the buyer may not come to a shop to receive the purchased goods. Thus, the system may operate in a way that a seller gets paid after a buyer
10   makes a payment.

"Blacklist of buyers"

A virtual shopping mall operations apparatus puts the e-mail address, of whom did not arrive to receive the goods despite that he/she made an order, into a black list. The
15   virtual shopping mall operations apparatus then manages this black list. If those who are in the black list make another order, the order becomes invalid. For example, if the virtual shopping mall operations apparatus receives an order from the same e-mail address for the second time, the order will be
20   ignored.

"Blacklist of sellers"

When a seller registers goods, an inspection process will be undertaken. If the goods that a seller tried to register to a virtual shop had been denied, the seller will be put in
25   a black list. The virtual shopping mall operations apparatus manages this black list. Certain penalty processes are conducted against the seller, according to the number of times the seller was black listed.

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"Cancellation of rights to sell goods"

When a seller wants to cancel the contract of the right
to sell goods on a virtual shop, the seller goes to the nearest
chain store. A terminal base unit installed at a chain store
5   has the function of cancel processing.

"Discount fee"

The fee for a virtual shop is set lower for sellers who
makes many deals. This discount may be arranged by unit of
goods. For example, the rental fee of the shelves is set free
10   for goods that sell well. The sale status is judged by whether
or not the number of trades during a certain period of time
is below the predetermined level. The basis amount may be
arranged differently according to the price of the goods. This
discount system may promote sellers to positively improve their
15   shops.

"Function of displaying rankings"

This is a function to display on each terminal a ranking
list of the number of trades made. A virtual shopping mall
operations apparatus makes the ranking list and sends the list
20   to each terminal. Preferably, ranking lists of a plurality
of categories, such as goods, category, and shop, are displayed
by switching over one another or on display. These rankings
may be sent to terminals of sellers and buyers as well as
terminals of a chain store.

25   For example, in a virtual shopping mall operations
apparatus, a column for the sum number of sales is set in the
owner managing database 22 and the commercial goods managing
database 24 for the function of displaying these rankings.
Every time a trade occurs, the value of the column increases.

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The result of the sum total is displayed on the home page of
the service.   Preferably, predetermined numbers (for example,
5) of goods, categories, and shops are displayed in order of
the largest number of the sum total.

5   Buyers can obtain profitable information by this kind
of display ranking.   Sellers can get a good stimulus for
improving their own shops.   Revitalization of the virtual
shopping mall system by these synergy effects can be expected.

          "Customer appreciation system"

10   This system is a function that discounts the price of
goods which makes many trades, according to the number of trades
made.

          Fig. 64 is an example of the discount setting table,
which is used for this function.   This table is prepared in
15   a virtual shopping mall operations apparatus.   Sale prices will
be discounted according to the number of trades made, based
on this table.   A seller can select the type of discount when
the seller registers goods.   The result of this choice is stored
in a virtual shopping mall operations apparatus, or a goods
20   database.   The price calculated based on the table will be
presented to buyers, according to the result of the choice.
A seller can also select whether or not to discount.

          Buyers can get an advantage because they can purchase
best-seller goods with lower prices, using the discount system
25   described above.   On the other hand, sellers can expect a
further increase in sold goods whose number of shipments has
hit the ceiling. Operators of virtual shops can expect an
increase in attracting more customers and the accompanying
increase in fee income.

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"System of returning points to buyers"

Points are accumulated according to the amount a buyer has purchased. Buyers can purchase goods by using the points for the next time. These points may be used for purchasing
5   other goods that sell at chain stores, that is, for purchasing goods other than at the virtual shopping mall.

Buyers can purchase goods anonymously in this virtual shopping mall service, but buyers have to input their e-mail addresses and telephone numbers when buyers make purchases.
10   A customer managing database is built by using these e-mail addresses and phone numbers as key pieces of information. A certain ratio, five percent, for example, of the traded amount is accumulated to the points for every trade. The accumulated points will be written in a point card of a chain store, by
15   inputting an e-mail address and a phone number on a terminal base unit at a shop. A buyer can then use the points. The point card may be used at a counter of a chain store other than on a terminal base unit at a shop.

<Advantages>

20   The preferred embodiments according to the present invention have been described above. Various advantages of the present embodiment will be described in the following.

(1) According to the present embodiment, a method and system for operating a virtual shopping mall of seller-engaged
25   type are provided. A seller participates in the virtual shopping mall system by using communications rather than managing a virtual shop by himself/herself.

According to the present embodiment, if a seller sends virtual goods information to a virtual shopping mall operations

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apparatus, the virtual shopping mall operations apparatus
manages the seller's virtual shop and its goods. Since a trade
between a seller and a buyer is intermediated by the virtual
shopping mall operations apparatus, direct contact is not
5   necessary. A seller does not need to present his/her name to
buyers. The credibility of the trades are assured by the
virtual shopping mall operations apparatus.

        In this way, according to the present embodiment, the
burden on sellers can be lightened compared to the conventional
10   Internet mail-order system. An individual can easily be a
seller of a virtual shopping mall system by the present
embodiment.

        According to the conventional Internet mail-order system,
a provider only provides a space for a homepage and plays a
15   role of only introducing sellers and buyers. Sellers require
a great deal of work including using computer language to make
a homepage. According to the present embodiment, the burden
on sellers can be reduced.

        (2) Moreover, according to the present embodiment, groups
20   of chained terminal bases and a physical distribution system
are well used as described in the following. A terminal base
is basically a chain store.

        First, the anonymity of sellers can be secured. If a
seller sends goods directly to a buyer like the conventional
25   Internet mail-order system, the name of the seller will be
exposed. According to the present embodiment, since the
delivery is conducted through a physical distribution system,
the name of a seller will not be exposed in the delivery of
goods. The anonymity of buyers is also secured.

30   A terminal base functions as a terminal post of the

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physical distribution system at the time of delivering goods.
A seller brings goods to a terminal post. A buyer receives
the goods at another terminal post. By taking advantage of
the physical distribution system, the delivery of goods is
5   conducted safely and promptly without fault.

As is already known, chain stores such a convenience
store functions as a terminal of a parcel delivery service,
or a door-to-door delivery service. However, the delivery
system according to the present embodiment differs
10   fundamentally from the delivery system of a parcel delivery
service. First of all, anonymity cannot be secured since a
seller must write his/her name and the destination. Further,
the function of delivery path setting and managing, for the
delivery of goods by virtual shops according to the present
15   embodiment, cannot be found in a parcel delivery service.

(3) Further, according to the present embodiment, a great
number of advantages are also provided to a chain store as
a terminal base.

According to the present embodiment, buyers visit a chain
20   store and receive goods. Sellers also bring in goods to a chain
store. Buyers and sellers are both customers and consumers
for a chain store. With only one trade in a virtual shopping
mall, two consumers visit chain stores. Therefore, chain
stores can attract more consumers.

25   Furthermore, the existing physical distribution system
that chain stores form is used effectively. In other words,
goods for virtual shops are delivered by taking advantage of
the reserve capacity of a physical distribution system for
real shops. Delivery charges can also be gained by this system.

30   Neither chain store has to expand its floor space nor

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manage goods. Since the registration of goods is conducted by sellers, the burden on chain stores is less. From the buyers point of view, chain stores look like as though they have shelves of virtual goods in their shops. All of the chain stores can
5   get the same effect as they sell many more goods. The chain stores can practically increase the amount of goods with which they deal without having stock.

(4) Further advantages for sellers will be described in the following.

10   A seller visits a terminal base and registers as an owner. The time and physical cost to obtain a right to sell goods is low. For example, if a terminal base is a convenience store, it will take only the same number of labor hours as going shopping for small articles as to open a virtual shop. Sellers do not
15   need to invest large amount of labor to make a homepage by themselves.

Sellers can exhibit virtual goods information, that is, goods catalog, broadly with less management cost. The practical labor to register goods will be only to take
20   photographs of goods by digital camera and to upload the photographed image data.

Sellers do not need to keep track of the stock all the time. Sellers can check the stock and respond to buyers only when an order is made. Sellers can have both a virtual shop
25   and a real shop. Sellers can also have a plurality of virtual shops.

Moreover, according to the present embodiment, the "shelves for goods," that is, the space for virtual shops, are set differently according to the fee charged to sellers.
30   A seller can have a virtual shop with a reasonable price,

according to his/her own financial muscle. This system can
be advantageous to the operator of the virtual shopping mall
system. The operator does not need to provide unnecessarily
large spaces to sellers and, therefore, can avoid wasting the
5   capacity of a memory.

Further, according to the present embodiment, the costs
to maintain a virtual shop are set lower for sellers whose
amount of trade is large. Each seller then tries to improve
his/her virtual shop and goods.

10   Furthermore, according to the present embodiment, goods
are inspected when sellers register goods. Then, penalties
are imposed on sellers if needed. By these penalties,
exhibiting inappropriate goods information can be avoided.
Thus, it becomes possible to form and maintain a virtual shopping
15   mall just as the operator of the virtual shopping mall designs.

Moreover, according to the present embodiment, a black
list, which shows buyers who do not receive real goods despite
having made a deal on a virtual shop, is formed. This black
list makes it possible to keep the trade safe.

20   (5) According to the present embodiment, terminal base
units installed at terminal bases can also be independent and
characteristic structures. A terminal base unit may be
installed at a chain store, for example. Terminal base units
are useful in functioning the virtual shopping mall system
25   smoothly by their preferable functions. The virtual shopping
mall system becomes more convenient by these preferable
functions.

Therefore, registration of sellers as owners becomes
easy by installing terminal base units. The delivery of goods
30   can be conducted smoothly. Appropriate services for

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registering goods can be provided to sellers. In particular,
the function of making image pictures of goods is convenient
to sellers. The function of printing catalogs is also
convenient.

5   For buyers, it is convenient to be able to search goods.
Buyers can gain access to virtual shops by using cellular phones.
However, functions of cellular phones are limited, for example
the size of the display. On the other hand, if buyers use
terminal base units, buyers can make use of virtual shops even
10   when buyers are outside.

        The present embodiment can be comprehended as a goods
distribution method or a goods distribution system. A virtual
shopping mall system, which is opened by using a computer system,
and a physical distribution system, which is formed at a
15   plurality of real chained terminal bases, are accreted in the
goods distribution system. The virtual shopping mall system
can provide functions of goods catalog and order management.

        Also, the present embodiment can be comprehended as a
chain store system. The chain store system includes a plurality
20   of chain stores and a physical distribution system that connects
the plurality of chain stores. The chain store system is
accreted with the virtual shopping mall system using a computer
system.

        Further, another embodiment may be a recording medium,
25   which achieves the method for operating a virtual shopping
mall described above. This program is executed by the server
of the virtual shopping mall operations apparatus.

        Although the present invention has been described by
way of exemplary embodiments, it should be understood that
30   many changes and substitutions may be made by those skilled

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in the art without departing from the spirit and the scope
of the present invention which is defined only by the appended
claims.

For example, various structures that are described in
5   the figures do not have to physically be one unit. The virtual
shopping mall operations apparatus may be a system structured
by a plurality of computers. Also, for example, although
sellers and buyers are connected to virtual shops by the Internet
according to the present embodiment, sellers and buyers may
10   be connected to virtual shops by other optional means of
communication.

According to the present invention, a method and system
for operating a virtual shopping mall of seller-engaged type
are provided. It is preferable that a physical distribution
15   system formed by chained terminal bases be used for delivering
goods of virtual shops. Virtual shopping then becomes
convenient.

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